IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic apparatus comprising:

a radiation source that produces EUV radiation;

an illumination system that provides a beam of said EUV radiation produced by said radiation source;

a support structure that supports a patterning structure, the patterning structure configured to impart the beam of radiation with a pattern in its cross-section;

a substrate support that supports a substrate; and

a projection system that projects the patterned beam onto a target portion of the substrate,

wherein said radiation source comprises a debris-mitigation system that mitigates debris particles which are formed during production of EUV radiation, the debris-mitigation system configured to provide additional particles for interacting with the debris particles, and

wherein the debris-mitigation system comprises a plurality of electrodes that cause a discharge of particles when a suitable voltage is applied so that the additional particles are generated.

2. (Original) A lithographic apparatus according to claim 1, wherein the debris-mitigation system is arranged to provide a flow of the additional particles.

3. (Original) A lithographic apparatus according to claim 2, wherein the debris-mitigation system is arranged to provide the flow into a direction which is substantially different from a downstream direction of a radiation beam.

4. (Original) A lithographic apparatus according to claim 2, wherein the debris-mitigation system is arranged to provide the flow of additional particles that substantially cross a radiation beam.

5. (Currently Amended) A lithographic apparatus according to claim 2, further comprising a collector for collecting EUV radiation that originates from the radiation source, wherein the debris-mitigation system is further arranged to provide ~~a~~ the flow of additional particles such that the additional particles flow substantially away from the collector.

6. (Original) A lithographic apparatus according to claim 2, wherein the debris-mitigation system is further arranged to provide a supersonic flow of additional particles.

7. (Original) A lithographic apparatus according to claim 1, wherein the additional particles comprise ionized particles.

8. Canceled.

9. (Currently Amended) A lithographic apparatus according to claim 1, wherein the debris-mitigation system further comprises a plasma generator that generates ~~the~~ further additional particles.

10. (Original) A lithographic apparatus according to claim 9, wherein the plasma generator comprises Radio Frequency induction coils.

11. Canceled.

12. Canceled.

13. (Currently Amended) A lithographic apparatus comprising:

a radiation source that produces EUV radiation;

an illumination system that provides a beam of said EUV radiation produced by said radiation source;

a support structure that supports a patterning structure, the patterning structure configured to impart the beam of radiation with a pattern in its cross-section;

a substrate support that supports a substrate;

a projection system that projects the patterned beam onto a target portion of the substrate; and

a particle generator that generates additional particles for interacting with debris particles, wherein said particle generator comprises an outlet and a pump.

14. Canceled.

15. (Currently Amended) A lithographic apparatus according to claim 13, wherein said particle generator further comprises a plurality of electrodes.

16. Canceled.

17. (Currently Amended) A lithographic apparatus according to claim ~~16~~13, wherein said pump comprises an ion getter pump.

18. (Currently Amended) A lithographic apparatus according to claim ~~16~~ 13, wherein said outlet and said pump are arranged to provide a flow of the additional particles ~~is~~ in a direction substantially different from a downstream direction of the beam of radiation.

19. (Original) A lithographic apparatus according to claim 13, wherein said particle generator forms part of said radiation source.

20. Canceled.

21. (New) A lithographic apparatus according to claim 13, wherein the particle generator is arranged to provide a supersonic flow of the additional particles.

22. (New) A lithographic apparatus comprising:

a radiation source that produces EUV radiation;

an illumination system that provides a beam of said EUV radiation produced by said radiation source;

a support structure that supports a patterning structure, the patterning structure configured to impart the beam of radiation with a pattern in its cross-section;

a substrate support that supports a substrate; and

a projection system that projects the patterned beam onto a target portion of the substrate,

wherein said radiation source comprises a debris-mitigation system that mitigates debris particles which are formed during production of EUV radiation, the debris-mitigation system configured to provide additional particles for interacting with the debris particles, and wherein the debris-mitigation system comprises a plasma generator configured to provide ionized particles.

23. (New) A lithographic apparatus according to claim 22, wherein the plasma generator comprises Radio Frequency induction coils.

24. (New) A lithographic apparatus comprising:

a radiation source that produces EUV radiation;

an illumination system that provides a beam of said EUV radiation produced by said radiation source;

a support structure that supports a patterning structure, the patterning structure

configured to impart the beam of radiation with a pattern in its cross-section;

a substrate support that supports a substrate; and

a projection system that projects the patterned beam onto a target portion of the substrate,

wherein said radiation source comprises a debris-mitigation system that mitigates debris particles which are formed during production of EUV radiation, the debris-mitigation system configured to provide a supersonic flow of additional particles for interacting with the debris particles.

25. (New) A lithographic apparatus comprising:

a radiation source that produces EUV radiation;

an illumination system that provides a beam of said EUV radiation produced by said radiation source;

a support structure that supports a patterning structure, the patterning structure configured to impart the beam of radiation with a pattern in its cross-section;

a substrate support that supports a substrate;

a projection system that projects the patterned beam onto a target portion of the substrate; and

a particle generator that generates additional particles for interacting with debris particles, wherein the particle generator comprises a plurality of electrodes.